

云南高黎贡山荨麻科楼梯草属六新种*

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摘要: 描述了云南高黎贡山荨麻科楼梯草属 6 新种: 三茎楼梯草、少叶楼梯草、指序楼梯草、片马楼梯草、茨开楼梯草和拟宽叶楼梯草。

关键词: 云南; 高黎贡山; 荨麻科; 楼梯草属; 新种

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Six New Species of *Elatostema* (Urticaceae) from Gaoligong Shan, Yunnan

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Abstract: In this paper, six species of the genus *Elatostema* (Urticaceae), *E. tricaule*, *E. paucifolium*, *E. dactylocephalum*, *E. pianmaense*, *E. cikaiense* and *E. pseudoplatyphyllum*, are described as new on the basis of the specimens which were collected from Gaoligong Shan, western Yunnan Province, China during recent two decades.

Key words: Yunnan; Gaoligong Shan; Urticaceae; *Elatostema*; New species

今年1月中旬,美国加利福尼亚州科学院 Bruce Bartholomew 博士寄来他和中国科学院昆明植物研究所李恒教授近 20 年来在云南高黎贡山采集的丰富荨麻科植物标本,托我鉴定,在鉴定过程中发现该科楼梯草属 6 新种,现在本文发表。

楼梯草属 *Elatostema* J. R. et G. Forst.

组 1. 小叶楼梯草组 Sect. *Weddellia* (H. Schörter)
W. T. Wang

1. 三茎楼梯草 图 1

Elatostema tricaule W. T. Wang, sp. nov. Fig. 1

Species nova haec est fortasse affinis *E. asterocephalo* W. T. Wang, quod lamina folii cystolithos gerenti, latere latiore nervis lateralibus 2 praetita, basi subauriculata, capitulo pistillato bracteis pluri-

bus usque 50 anguste triangularibus apice breviter corniculatis praedito praeclare distinguuntur.

Herba perennis parva. Tuber subglobosum, circ. 1.5 cm in diam. Caules 3 fasciculati, circ. 15 cm alti, supra basin 1.2–1.8 mm crassi, glabri, simplices vel 2-ramosi. Folia brevissime petiolata vel sessilia, glabra; laminae papyraceae, oblique angustae ellipticae vel oblique rhombicae, 1–5.2 cm longae, 0.6–2 cm latae, cystolithis carentes, apice acuminatae, raro longe acuminatae, basi oblique cuneatae, margine supra basin dentatae, trinerves vel semitriplinerves, nervis lateralibus laminae in latere angustiore 2, in latere latiore 3–4, supra planis subtus prominulis; petioli 0.6–1 mm longi; stipulae subulatae, 1–1.8 mm longae, 0.15 mm latae. Ca-

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pitula pistillata parva, binatim axillaria, sessilia; receptaculum suborbiculare, circ. 0.8 mm in diam., glabrum; bracteae circ. 15, praeter eam minorem anguste triangularem 0.4 mm longam apice acutiusculam plerumque lineares, 0.6–0.8 mm longae, 0.2–0.4 mm latae, apice subtruncatae, glabrae; bracteolae densae, virides, anguste spathulato-lineares, 1–1.2 mm longae, prope apicem ciliolatae. Flos pistillatus longe pedicellatus; tepala inconspicua; pistillum circ. 0.5 mm longum, ovario anguste ellipsoideo 0.4 mm longo, stigmate subglobooso 0.1 mm longo. Achenia brunnea, subellipsoidea, circ. 0.6 mm longa, longitudinaliter 6-costata.

多年生小草本。块茎近球形，直径1.5 cm。茎3条丛生，高约15 cm，基部之上粗1.2~1.8 mm，无毛，不分枝或有2分枝。叶具极短柄或无柄，无毛；叶片纸质，斜狭椭圆形或斜菱形，长1~5.2 cm，宽0.6~2 cm，顶端渐尖，稀长渐尖，基部斜楔形，边缘在基部之上具牙齿，钟乳体不存在，三出脉或半离基三出脉，侧脉在狭侧2条，在宽侧3~4条，上面平，下面稍隆起；叶柄长0.6~1 mm；托叶钻形，长1~1.8 mm，宽0.15 mm。雌头状花序小，成对腋生，无梗；花序托近圆形，直径约0.8 mm，无毛；苞片约15枚，多呈条形，长0.6~0.8 mm，宽0.2~0.4 mm，顶端近截形，只1枚苞片狭三角形，

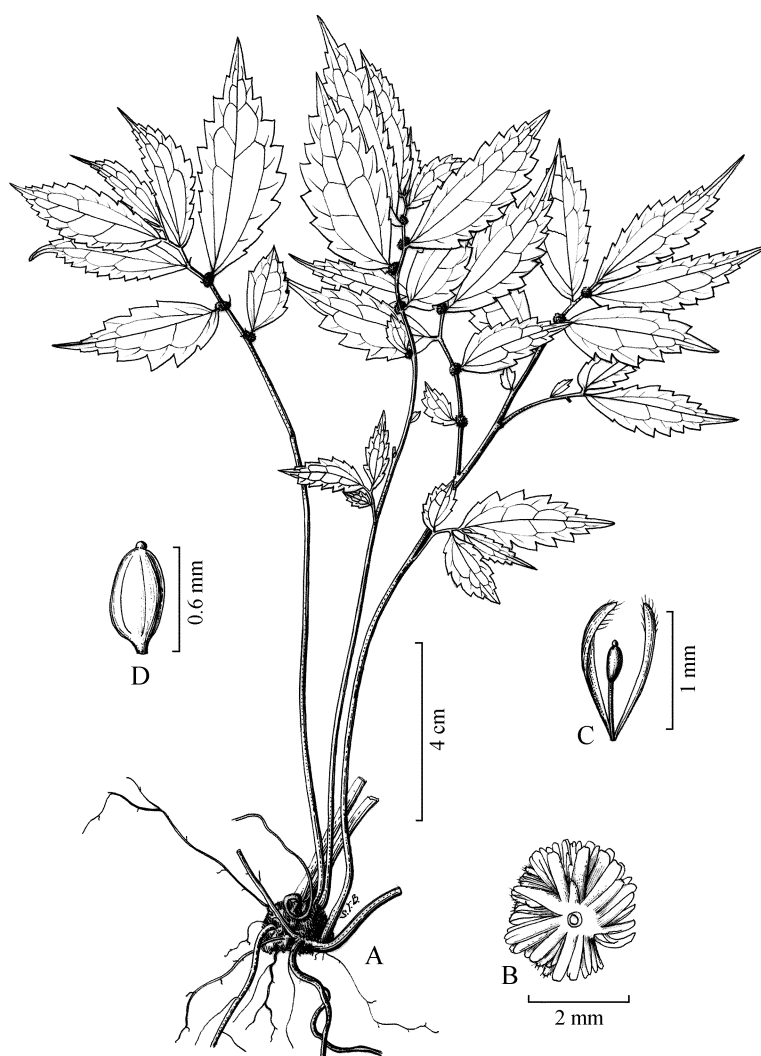


图1 三茎楼梯草 A. 植株全形, B. 雌头状花序, C. 雌小苞片和雌花, D. 瘦果

Fig. 1 *Elatostema tricaule* W. T. Wang

A. habit, B. pistillate capitulum, C. pistillate bracteoles and pistillate flower, D. achene. (from holotype)

长 0.4 mm, 顶端微尖, 无毛; 小苞片密集, 绿色, 狭匙状条形, 长 1~1.2 mm, 近顶端被短缘毛。雌花具长梗: 花被片不明显; 雌蕊长约 0.5 mm, 子房狭椭圆球形, 长 0.4 mm, 柱头近球形, 长 0.1 mm。瘦果褐色, 近椭圆球形, 长约 0.6 mm, 有 6 条纵肋。

云南: Tengchong (腾冲): Ruidian. Yunfeng Cun (云峰村). Yunfeng Shan (云峰山), along trail from Yunfeng Si to base of mountain on N side of the moist valley directly E of Yunfeng Si, ca. 8.6 direct km SSW of Ruidian, 25°22'48.1"N, 98°24'59.1"E, elev. 2 010 m; subtropical evergreen broad-leaved forest undisturbed, dominated by *Lithocarpus* and *Schima* with scattered *Pinus* on dryer slopes; herb. common, growing under forest in moist shady area, in humus on granite; 3 June 2006. Gaoligong Shan Biodiversity Survey 30000 (♀, holotype, CAS).

本种可能与星序楼梯草 *E. asterocephalum* W. T. Wang 有亲缘关系, 但叶片在基部斜楔形, 无钟乳体, 宽侧侧脉 3~4 条, 雌头状花序的苞片较少, 约 15 枚, 呈条形, 顶端无突起而明显不同。在星序楼梯草, 叶片宽侧基部近耳形, 有杆状钟乳体, 宽侧侧脉 2 条, 雌头状花序的苞片较多, 达 50 枚, 呈狭三角形, 顶端有短角状突起 (Wang, 1995)。

2. 少叶楼梯草 图 2

***Elatostema paucifolium* W. T. Wang, sp. nov.** Fig. 2

Species nova haec est fortasse affinis *E. coriaceifolio* W. T. Wang, quod caulibus e parte infera ad apicem 11–20-foliatis, foliorum laminis margine supra medium pauce denticulatis glabris, capitulo pistillato singulariter axillari, ejus bracteis triangularibus dorso saepe cristatis brunneo-striolatis facile recedit.

Herba perennis parva. Caules aliquot fasciculati, 18–24 cm alti, supra basin circ. 1.5 mm crassi, inferne vel prope basin ad nodos radicanes, glabri, simplices interdum infra medium ramos longos 1–2 prodientes, prope apicem caulis et rami 2–5-foliati. Folia sessilia, papyracea, oblique elliptica vel oblique rhombica, 0.8–3.3 cm longa, 0.5–1.3 cm

lata, apice acuminata vel acuta, basi oblique cuneata, margine supra basin dentata, supra sparse puberula, ob pilos circ. 0.2 mm longos faciliter dilapsos cito glabrescentia, subtus glabra, semitriplinervia, nervis lateralibus 2-jugatis utrinque planis, cystolithis sparsis inconspicuis bacilliformibus 0.1–0.3 mm longis; stipulae subulatae, 1.5–2 mm longae, 0.2 mm latae, glabrae. Capitula pistillata parva, ad foliorum axillas vel nodos nudos binatim crescentia, sessilia; receptaculum late rectangulare, circ. 3 mm longum, 1.6 mm latum, glabrum; bractee

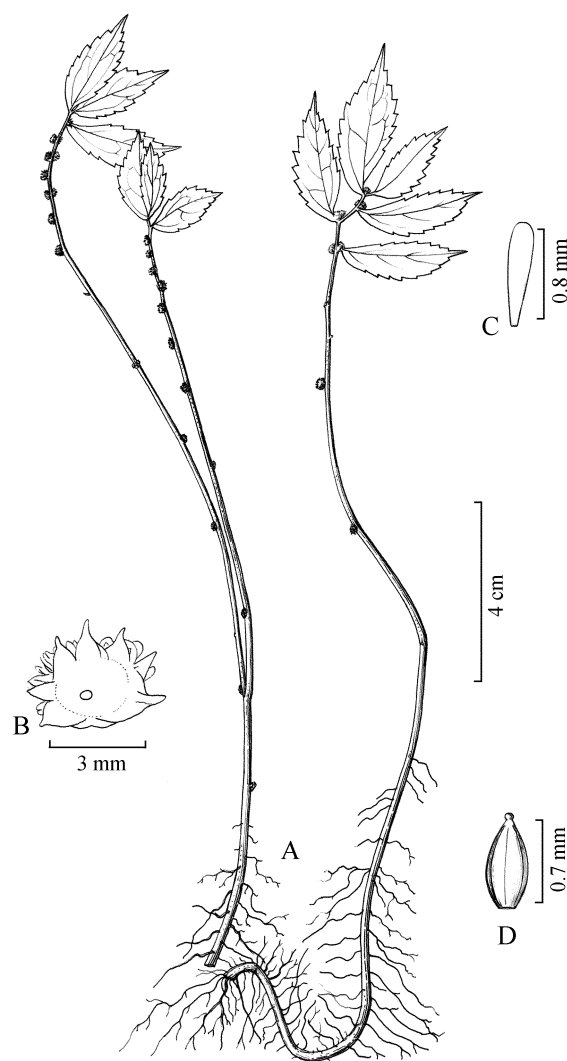


图 2 少叶楼梯草

A. 植株全形, B. 雌头状花序, C. 雌小苞片, D. 瘦果

Fig. 2 *Elatostema paucifolium* W. T. Wang

A. habit, B. pistillate capitulum, C. pistillate bracteole, D. achene. (from holotype)

circ. 7, inaequales, late ovatae vel ovatae, 0.6–0.8 mm longae, 0.5–1.5 mm latae glabrae, eae majores apice breviter crasseque corniculatae, cornibus 0.2–0.3 mm longis; bracteolae densae, semihyalinae, cuneato-lineares, circ. 0.8 mm longae, glabrae, apice rotundato-truncatae. Achenia brunnea, anguste ovoidea, circ. 0.7 mm longa, longitudinaliter 5-costata, stigmatibus persistentibus minutis subglossis.

多年生小草本。茎数条丛生，高18~24 cm，基部之上粗约1.5 mm，下部或近基部在节上生根，无毛，常在下部有1~2长分枝，与枝在近顶端有2~5叶。叶无柄，纸质，斜椭圆形或斜菱形，长0.8~33.3 cm，宽0.5~1.3 cm，顶端渐尖或急尖，基部斜楔形，边缘在基部之上有牙齿，上面疏被短柔毛（毛长约0.2 mm），很快变无毛，下面无毛，钟乳体稀疏，不明显，杆状，长0.1~0.3 mm，半离基三出脉，侧脉2对，两面平；托叶钻形，长1.5~2 mm，宽0.2 mm，无毛。雌头状花序小，成对生于叶腋或生于叶下无叶的节上，无梗；花序托宽长方形，长约3 mm，宽1.6 mm，无毛；苞片约7枚，不等大，宽卵形或卵形，长0.6~0.8 mm，宽0.5~1.5 mm，较大苞片顶端具短而粗的角状突起（突起长0.2~0.3 mm），无毛；小苞片密集，半透明，楔状条形，长约0.8 mm，无毛，顶端圆截形。瘦果褐色，狭卵球形，长约0.7 mm，有5条纵肋；宿存柱头小，近球形。

云南：Lushui Xian（泸水县），Wancaoping, N of Pianma（片马）on the W side of Gaoligong Shan near the Myanmar border, 26°1'38"N, 98°37'43"E, elev. 1 950–2 050 m; disturbed secondary broad-leaved evergreen forest and riparian vegetation in small valley; perennial herb, growing on a steep bank by stream; flowers pale green; 12 October 1998. Li Heng, Bruce Bartholomew & Dao Zhi-lin 10272（♀, holotype, CAS）.

本种可能与革叶楼梯草 *E. coriaceifolium* W. T. Wang 有亲缘关系，但茎在近顶部只有2~5枚叶，叶片边缘从基础之上到近顶端有较多牙齿，上面最初有短柔毛，以后变无毛，雌头状花序成对生叶腋或叶下的无叶节上，苞片宽卵形或卵

形，无鸡冠状突起，无褐色细条纹而明显不同。在革叶楼梯草，茎自下部至顶端有11~20枚叶，叶片边缘在中部之上有少数小牙齿，两面无毛，雌头状花序单生叶腋，苞片三角形，背面常有鸡冠状突起，并有褐色细条纹（Wang, 1993）。

3. 指序楼梯草 图3

Elatostema dactylocephalum W. T. Wang, sp. nov. Fig. 3

Species nova insignis capituli pistillati bracteis involucribus bracteolisque plus minusve carnosae, linearibus apice obtusis, superne intense viridibus et leviter incrassatis a speciebus sinenibus cognitis bracteis complanatis, e carnosae, triangularibus, ovatis vel late ovatis apice acutis, bracteolis membranaceis albidis semihyalinis, linearibus, oblanceolatis vel spatulatis saepe ciliatis praeditis bene distincta.

Herba perennis. Caules circ. 30 cm alti, supra basin 2–3 mm crassi, glabri, simplices, 7–9-foliati. Folia sessilia, membranacea vel tenuiter papyracea, oblique longeque elliptica vel oblique elliptica, 1.5–10.5 cm longa, 1–2.8 cm lata, apice acuminate, raro acuta, basi oblique cuneata, margine praeter partem tertiam inferam integram denticulata vel crenata, glabra, semitriplinervia, nervis lateralibus laminae in latere angustiore 2, in latere latiore 3, utrinque planis, cystolithis inconspicuis densis bacilliformibus 0.1–0.25 mm longis; stipulae anguste subulato-lineares, 4–5 mm longae, circ. 0.4 mm latae, apice pungentes. Capitula pistillata binatim axillaria, sessilia; receptaculum late suboblongum, circ. 2.4 mm longum, 1.5 mm latum, glabrum; bractaeae circ. 12, virides, leviter carnosae, inaequales, lineares vel triangulari-lineares, 0.5–1.8 mm longae, 0.3–0.4 mm latae, apice obtusae, superne intense virides et leviter incrassatae, glabrae; bracteolae circ. 30, virides, plus minusve carnosae, oblanceolato-lineares vel lineares, 0.4–1.2 mm longae, circ. 0.2 mm latae, apice obtusae, superne intense virides et leviter incrassatae, glabrae. Flos pistillatus breviter pedicellatus; tepala inconspicua; pistillum circ. 0.65 mm longum, ovario viridulo anguste

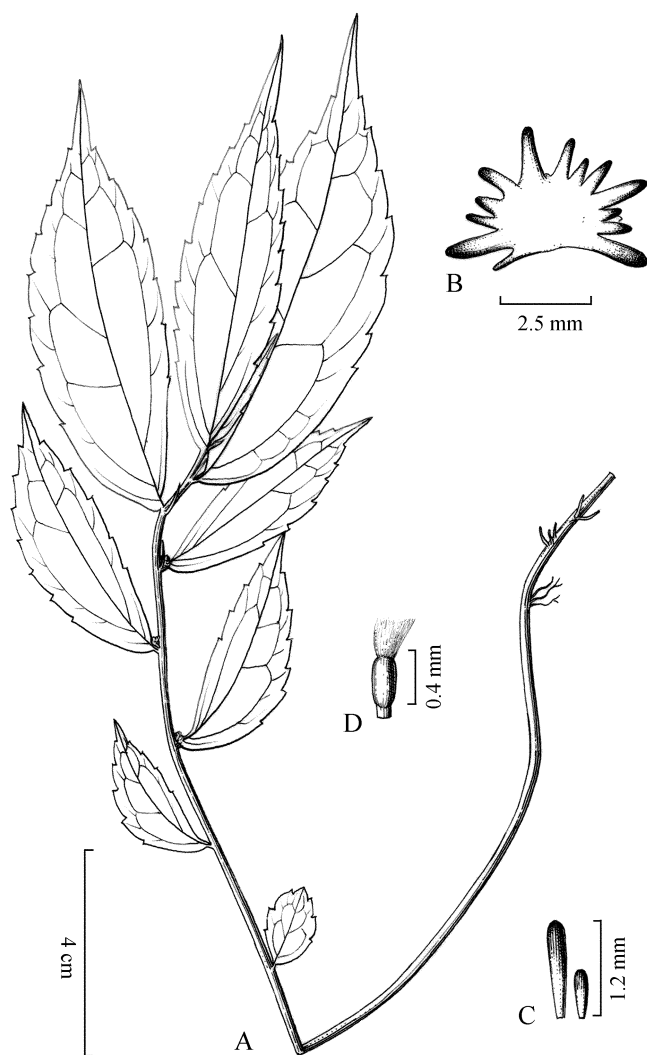


图3 指序楼梯草 A. 植株全形, B. 雌头状花序, C. 雌小苞片, D. 雌花

Fig. 3 *Elatostema dactylocephalum* W. T. Wang

A. habit, B. pistillate capitulum, C. pistillate bracteoles, D. pistillate flower. (from holotype)

ellipsoideo 0.35 mm longo, stigmatibus albo penicillatis 0.3 mm longo, pilis densis.

多年生草本。茎高约 30 cm，基部之上粗 2 ~ 3 mm，无毛，不分枝，有 7 ~ 9 叶。叶无柄，膜质或薄纸质，斜长椭圆形或斜椭圆形，长 1.5 ~ 10.5 cm，宽 1 ~ 2.8 cm，顶端渐尖，稀急尖，基部斜楔形，边缘下部 1/3 部分全缘，其上具小牙齿或浅钝齿，无毛，钟乳体不明显，密集，杆状，长 0.1 ~ 0.25 mm，半离基三出脉，侧脉在狭侧 2 条，在宽侧 3 条，两面平；托叶狭钻状条形，长 4 ~ 5 mm，宽约 0.4 mm，顶端锐尖。雌头状花序成对腋生，无梗；花序托近宽长圆形，长约 2.4 mm，宽 1.5 mm，无毛；苞片约 12 枚，绿

色，稍肉质，不等大，条形或三角状条形，长 0.5 ~ 1.8 mm，宽 0.3 ~ 0.4 mm，顶端钝，上部深绿色，同时稍变粗，无毛；小苞片约 30 枚，绿色，多少肉质，倒披针状条形或条形，长 0.4 ~ 1.2 mm，宽约 0.2 mm，顶端钝，上部深绿色，同时稍变粗，无毛。雌花具短梗：花被片不明显；雌蕊长约 0.65 mm，子房淡绿色，狭椭圆球形，长 0.35 mm，柱头白色，画笔头状，长 0.3 mm，毛密集。

Yunnan (云南): Longling Xian (龙陵县), Zhen-an Zhen (镇安镇), vicinity of Wei-ming Qiao, ca. 5 km E of Nanokang Yakou on the new road from Baoshan (保山) to Tengchong (腾冲),

E side of Gaoligong Shan, 24°48'48"N, 98°46'58"E; elev. 2 016 m; subtropical evergreen broad-leaved forest, disturbed by felling; herb 30–40 cm tall, frequent, growing along stream in forest shade; flowers green; 25 May 2005, Gaoligong Shan Biodiversity Survey 23678 (holotype, PE; isotype, CAS, not seen).

本种的雌头状花序的总苞苞片和小苞片均多少肉质, 绿色, 狭长, 呈条形, 上部深绿色并多少变粗, 这些特征在楼梯草属中甚为罕见, 根据这些特征可与我国楼梯草属其它种相区别。在我国的近170种 (Wang, 1993, 1997, 2003, 2006, 2010; Wang 和 Wei, 2007, 2008; Lin 等, 2003; Lin 和 Duan, 2008; Wei 和 Wang, 2009a, b, c) 中, 雌头状花序的总苞苞片均扁平, 不为肉质, 多数呈三角形、卵形或宽卵形, 顶端急尖; 雌小苞片也均扁平, 不为肉质, 质地为薄膜质, 白色, 半透明, 多呈条形、倒披针形或匙形, 常被缘毛 (Wang, 2010)。

组 2. 骤尖楼梯草组 Sect. *Elatostema*

4. 片马楼梯草 图 4

Elatostema pianmaense W.T. Wang, sp. nov. Fig. 4

Species nova haec est fortasse affinis *E. subcupidato* W.T. Wang, quod foliis trinerviis, capituli pistillati bracteis minimis inconspicuis, earum projecturis apicalibus lanceolato-linearibus 1.2–2 mm longis 0.3–1 mm latis bracteis multo majoribus, bracteolis pistillatis majoribus apice corniculatis praeclare distinguitur.

Herba perennis, tota siccitate plus minusve nigrescens. Caulis ascendens, circ. 56 cm altus, supra basin 4 mm crassus, longitudinaliter vadosaque 5-sulcatus, superne sparse hirtellus, simplex. Folia brevissime petiolata vel subsessilia; laminae papyraceae, oblique obovatae vel oblique angustae ellipticae, 7.8–12 cm longae, 2.8–4.5 cm latae, apice acuminatae, basi lateris angustioris cuneatae, basi lateris latioris rotundato-obtusae, margine supra basin dentatae, supra sparse strigosae, subtus ad nervos hirtellae, semitriplinerves, nervis lateralibus laminae in latere angustiore 2–3, in latere latiore 3–

4 supra planis subtus prominulis, cystolithis densis inconspicuis bacilliformibus 0.1–0.25 mm longis; petioli usque ad 3 mm longi, hirtelli; stipulae albidae, lanceolato-lineares, 9–14 mm longae, 2.2–2.5 mm latae, nervo atrobrunneo praeditae, supra glabrae, subtus ad nervum hirtellae, brunneo-lineolatae. Capitula pistillata binatim axillaria; pedunculus robustus, circ. 2 mm longus, glaber; receptaculum suborbiculare, circ. 3.5 mm in diam., glabrum; bractae circ. 15, inaequales, late ovatae, triangulares vel anguste triangulares, circ. 1 mm longae, 0.4–1 mm latae, ciliatae, paucae apice breviter corniculatae, cornibus 0.3–0.5 mm longis; bracteolae densae, virides, anguste lineares, 0.5–2 mm longae, superne ciliatae. Achenia brunnea, ellipsoidea, circ. 0.6 mm longa, longitudinaliter 5-costata.

多年生草本, 干时整个植物多少变黑色。茎渐升, 高约 56 cm, 基部之上粗 4 mm, 有 5 条浅纵沟, 上部疏被短硬毛, 不分枝。叶具极短柄或近无柄; 叶片纸质, 斜倒卵形或斜狭椭圆形, 长 7.8~12 cm, 宽 2.8~4.5 cm, 顶端渐尖, 基部在狭侧楔形, 在宽侧圆钝, 边缘在基部之上具牙齿, 上面疏被糙伏毛, 下面脉上被短硬毛, 钟乳体密, 不明显, 杆状, 长 0.1~0.25 mm, 半离基三出脉, 侧脉在狭侧 2~3 条, 在宽侧 3~4 条, 上面平, 下面稍隆起; 叶柄长达 3 mm, 被短硬毛; 托叶白色, 披针状条形, 长 9~14 mm, 宽 2.2~2.5 mm, 具 1 条暗褐色脉, 上面无毛, 下面脉上被短硬毛, 有褐色短线纹。雌头状花序成对腋生; 花序梗粗壮, 长约 2 mm, 无毛; 花序托近圆形, 直径约 3.5 mm, 无毛; 苞片约 15 枚, 不等大, 宽卵形, 三角形或狭三角形, 长约 1 mm, 宽 0.4~1 mm, 有缘毛, 少数苞片顶端具角状突起 (突起长 0.3~0.5 mm); 小苞片密集, 绿色, 狭条形, 长 0.5~2 mm, 上部有缘毛。瘦果褐色, 椭圆球形, 长约 0.6 mm, 有 5 条纵肋。

云南: Lushui Xian (泸水县), Pianma Xiang (片马乡), vicinity of Ganhe, ca. 12 km N of Pianma on the road to Ganfeng, W side of Gaoligong Shan, 26°3'43" N, 98°37'9" E, elev. 2 057 m; subtropical evergreen broad-leaved forest, disturbed

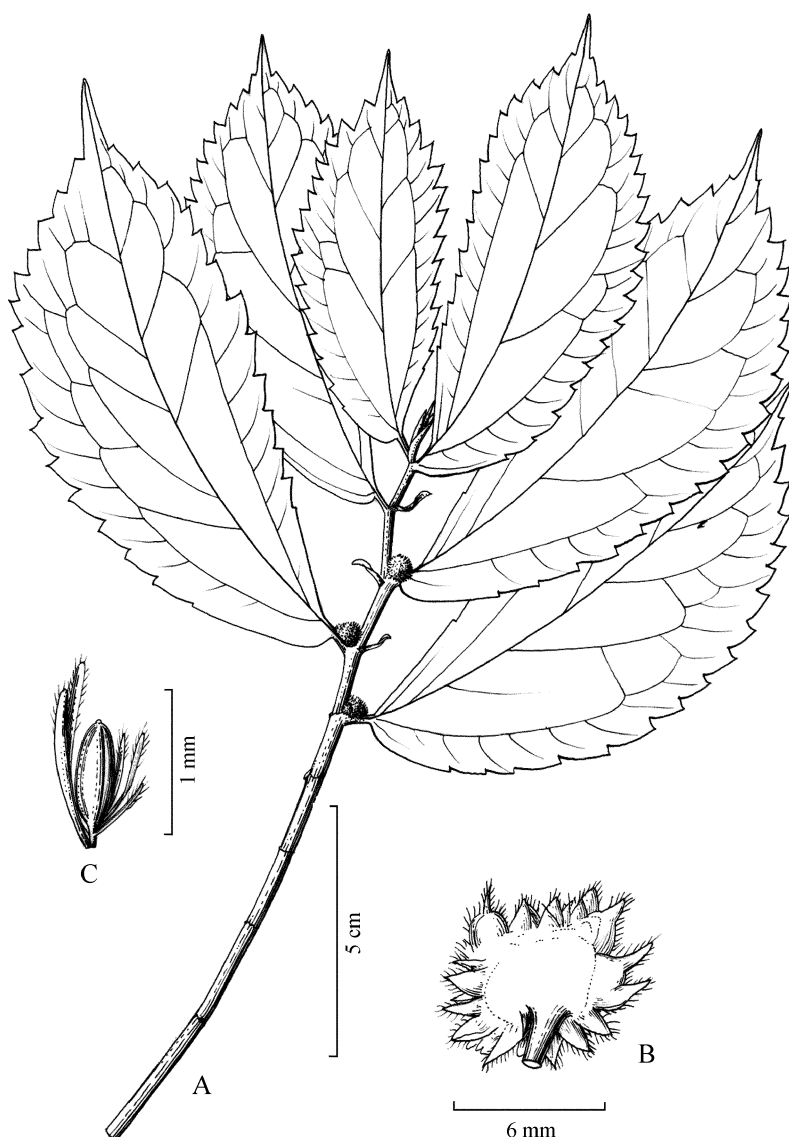


图4 片马楼梯草 A. 开花茎上部, B. 雌头状花序, C. 雌小苞片和瘦果

Fig.4 *Elatostema pianmaense* W. T. Wang

A. upper part of flowering stem, B. pistillate capitulum, C. pistillate bracteoles and achene. (from holotype)

by clearing; herb 30–60 cm tall, growing by river bank in loam on limestone, frequent; flowers white; 13 May 2005, Gaoligong Shan Biodiversity Survey 24077 (♀, holotype, PE; isotype, CAS, not seen).

本种可能与拟骤尖楼梯草 *E. subcuspidatum* W. T. Wang 有亲缘关系, 但叶具半离基三出脉, 雌头状花序的苞片正常发育, 明显, 长约 1 mm, 少数苞片的顶生角状突起比苞片小, 长 0.3 ~ 0.5 mm, 雌小苞片无任何突起而不同。在拟骤尖楼梯草, 叶具三出脉, 雌头状花序的苞片极小, 不

明显, 而其等的顶生突起呈披针状条形, 长 1.2 ~ 2 mm, 宽 0.3 ~ 1 mm, 远比苞片大, 雌小苞片中较大者顶端有角状突起 (Wang, 1995)。

5. 茨开楼梯草 图 5

***Elatostema cikaiense* W. T. Wang, sp. nov.** Fig.5

Species nova haec est arcte affinis *E. pachycerati* W. T. Wang, quod foliorum laminis subtus glabris, nervis lateralibus subtus prominulis, capituli staminati receptaculo cystolithis carenti, ejus bracteis

paucioribus circ. 6 uniseriatis omnibus apice crasse corniculatis, capituli pistillati bracteis etiam paucioribus circ. 6, acheniis longitudinaliter 9-costatis recedit.

Herba perennis, dioecia. Caules 42–46 cm alti, supra basin 3–4 mm crassi, glabri, longitudinaliter vadosaque 4-sulcati, simplices vel breviter 2-ramosi. Folia breviter petiolata vel sessilia; laminae papyraceae, oblique angusteque ellipticae vel ob-

lique angusteque obovatae, 6.5–14.5 cm longae, 2.5–5 cm latae, apice cuspidatae vel longe acuminate, basi lateris angustioris cuneatae basi lateris latioris rotundatae vel subauriculatae, margine supra basin grosse dentatae, supra sparse strigosae, subtus ad nervos sparse hirtellae, semitriplinerves, nervis lateralibus laminae in latere angustiore 2–3, in latere latiore 3–4, supra planis subtus prominentibus, cystolithis densis conspicuis bacilliformibus 0.2–0.5 mm

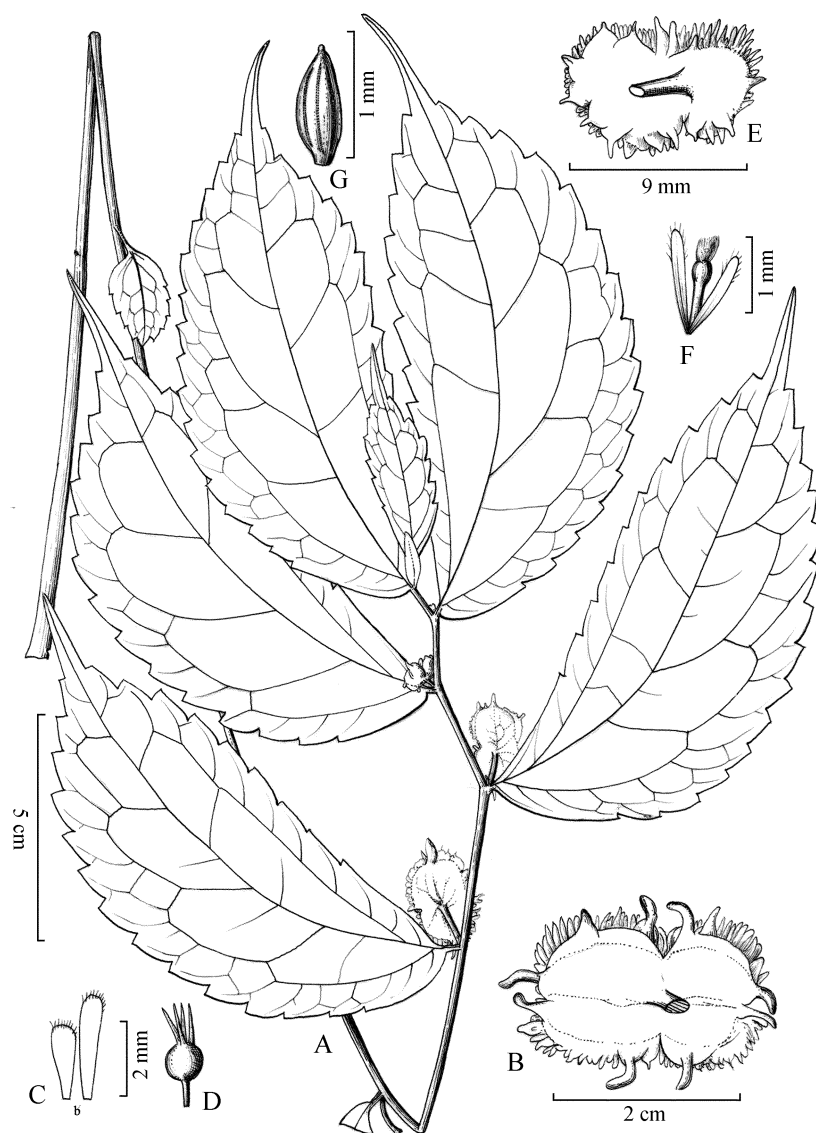


图5 茨开楼梯草 A. 开花雄茎, B. 雄头状花序, C. 雄小苞片, D. 雄花蕾, E. 雌头状花序, F. 雌小苞片和雌花, G. 瘦果

Fig. 5 *Elatostema cikaiense* W. T. Wang

A. flowering staminate stem, B. staminate capitulum, C. staminate bracteoles, D. staminate flower bud, E. pistillate capitulum, F. pistillate bracteoles and pistillate flower, G. achene. (from paratype)

longis; petioli usque ad 4 mm longi, glabri; stipulae membranaceae, albae, semihyalinae, lanceolato-lineares, circ. 11 mm longae, 2.8 mm latae, apice obtusae, glabrae, inconspicue 1-nerves, cystolithis bacilliformibus 0.25 mm longis secus nervum medianum dispersis. Capitula staminata magna, singulariter axillaria; pedunculus robustus, 2–7 mm longus, glaber; receptaculum oblongum, 7.4–18 mm longum, 8–11 mm latum, glabrum, cystolithis bacilliformibus 0.1–0.3 mm longis praeditum; bracteae 2-seriatae, glabrae, eae externae circ. 8, depresso-deltoidae, circ. 1.5 mm longae, 4 mm latae, apice cristatae, cristis 4–5 mm longis, eae internae circ. 12, deltoideae, circ. 0.5 mm longae, 1–1.5 mm latae, apice crasse corniculatae, cornibus circ. 1.2 mm longis; bracteolae densissimae, semihyalinae, cuneato-lineares, 2–3 mm longae, 0.8–1 mm latae, apice truncatae et ciliolatae. Alabastra staminata pedicellata, subglobosa, circ. 1.2 mm in diam., apice longe 4-corniculata, glabra. Capitula pistillata singulariter axillaria; pedunculus 2 mm longus; receptaculum suboblongum, circ. 7 mm longum, 2.5–4 mm latum, glabrum; bracteae circ. 14, deltoideae, glabrae circ. 1 mm longae, 0.8 mm latae, apice crasse corniculatae, cornibus 0.5–0.8 mm longis; bracteolae densae, semihyalinae, anguste oblanceolatae, 1–1.5 mm longae, apice ciliolatae. Flos pistillatus pedicellatus; tepala inconspicua; pistillum circ. 0.7 mm longum, ovario late ellipsoideo 0.35 mm longo, stigmatibus penicillato 0.35 mm longo. Achenia brunnea, anguste ellipsoideo-ovoidea, circ. 0.8 mm longa, longitudinaliter 6-costata.

多年生草本, 雌雄异株。茎高 42 ~ 46 cm, 基部之上粗 3 ~ 4 mm, 无毛, 有 4 条浅纵沟, 不分枝或有 2 条短分枝。叶具短柄或无柄; 叶片纸质, 斜狭椭圆形或斜狭倒卵形, 长 6.5 ~ 14.5 cm, 宽 2.5 ~ 5 cm, 顶端骤尖或长渐尖, 基部在狭侧楔形, 在宽侧圆形或近耳形, 边缘基部之上有粗牙齿, 上面疏被糙伏毛, 下面脉上疏被短硬毛, 钟乳体密, 明显, 杆状, 长 0.2 ~ 0.5 mm, 半离基三出脉, 侧脉在狭侧 2 ~ 3 条, 在宽侧 3 ~ 4 条, 上面平, 下面隆起; 叶柄长达 4 mm, 无毛; 托

叶膜质, 白色, 半透明, 披针状条形, 长约 11 mm, 宽 2.8 mm, 在顶端钝, 无毛, 有 1 条不明显脉, 沿脉散布长 0.25 mm 的杆状钟乳体。雄头状花序大, 单生叶腋; 花序梗粗壮, 长约 2 ~ 7 mm, 无毛; 花序托长圆形, 长 7.4 ~ 18 mm, 宽 8 ~ 11 mm, 无毛, 具长 0.1 ~ 0.3 mm 的杆状钟乳体; 苞片 2 层, 无毛, 外层苞片约 8 枚, 扁正三角形, 长约 1.5 mm, 宽 4 mm, 顶端有鸡冠状突起 (突起长 4 ~ 5 mm), 内层苞片约 12 枚, 正三角形, 长约 0.5 mm, 宽 1 ~ 1.5 mm, 顶端有粗角状突起 (突起长约 1.2 mm); 小苞片极密, 半透明, 楔状条形, 长 2 ~ 3 mm, 宽 0.8 ~ 1 mm, 顶端截形, 被短缘毛。雄花蕾具梗, 近球形, 直径约 1.2 mm, 顶端有 4 条长角状突起, 无毛。雌头状花序单生叶腋; 花序梗长 2 mm; 花序托近长圆形, 长约 7 mm, 宽 2.5 ~ 4 mm, 无毛; 苞片约 14 枚, 正三角形, 长约 1 mm, 宽 0.8 mm, 顶端有粗角状突起 (突起长 0.5 ~ 0.8 mm), 无毛; 小苞片密, 半透明, 狭倒披针形, 长 1 ~ 1.5 mm, 顶端有短缘毛。雌花具梗; 花被片不明显; 雌蕊长约 0.7 mm, 子房宽椭圆球形, 长 0.35 mm, 柱头画笔头状, 长 0.35 mm。瘦果褐色, 狭椭圆球状卵球形, 长约 0.8 mm, 有 6 条纵肋。

云南: Gongshan Xian (贡山县), Cikai Zhen (茨开镇), E side of Gaoligong Shan, W of Gongshan and E of Qiqi along the Pula he in the vicinity of Qiqi Bridge, 27°43'23" N, 98°35'13" E, elev. 1850 m; broad-leaved evergreen forest with scattered *Taiwania*; rhizomatous perennial herb, growing on steep moist slope in shade; flowers white; 10 July 2000; Li Heng, Bruce Bartholomew, Philip Thomas, Peter Fritsch, Dao Zhi-ling, Wang Zhong-lan & Li Rong 12217 (♂, holotype, CAS). Same locality, about 41 km from Gongshan on the road to Kangdang, E side of Gaoligong Shan, 27°47'23" N, 98°31'42" E; elev. 2940 m; subtropical evergreen broad-leaved forest; herb 50–80 cm tall, rare; flowers green; 21 September 2002; Gaoligong Shan Biodiversity Survey 15388 (♀, CAS).

本种在亲缘关系上与粗角楼梯草 *E. pachyceras* W. T. Wang 很相近, 但叶片下面脉上被短硬

毛，侧脉下面明显隆起，雄头状花序的花序托有钟乳体，其苞片较多，约 20 枚，排成二层，外层苞片顶端有鸡冠状突起，雌头状花序的苞片也较多，约 14 枚，瘦果有 6 条纵肋而不同。在粗角楼梯草，叶片下面无毛，侧脉下面稍隆起，雄头状花序的花序托无钟乳体，其苞片较少，约 6 枚，排成一层，所有苞片顶端均有粗角状突起，雌头状花序的苞片也较少，约 6 枚，瘦果有 9 条纵肋（Wang, 1995）。

6. 拟宽叶楼梯草 图 6

Elatostema pseudoplatyphyllum W. T. Wang,

sp. nov. Fig. 6

Species nova haec est arcte affinis *E. platyphylo* Wedd., quod foliorum laminis supra glabris, eorum auriculis majoribus usque ad 14 mm longis, capituli staminati bracteis valde diminutis inconspicuis depresso latissimeque ovatis vix 0.2 mm longis, bracteolis ciliatis statim differt, et fortasse e specie nova hac oriundum est.

Herba perennis. Caules circ. 40 cm alti, basi circ. 5 mm crassi, glabri, longitudinaliter vadosaque 4-sulcati, simplices, interdum breviter pauceque ramosi. Folia breviter petiolata; laminae papyraceae,

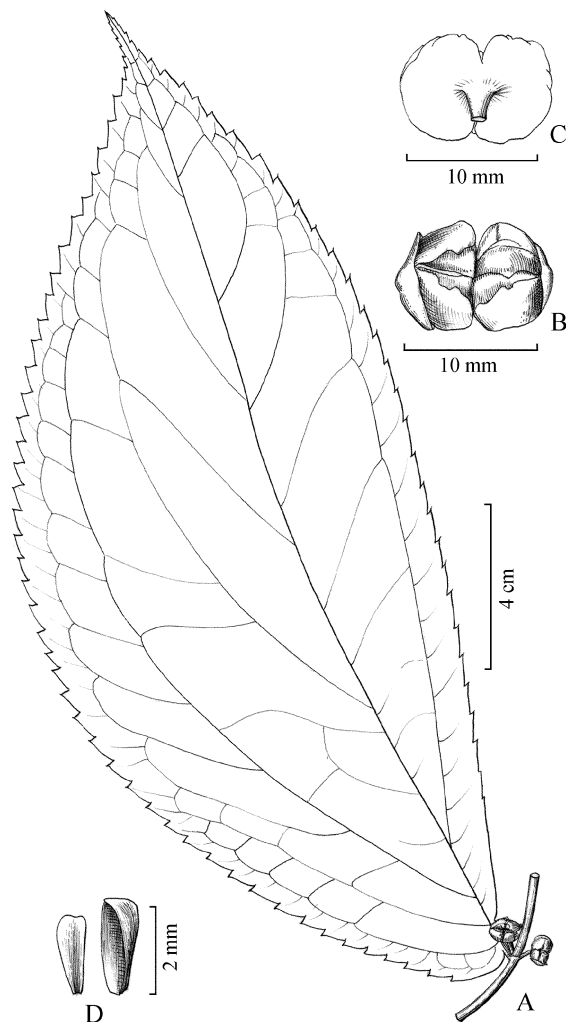


图 6 拟宽叶楼梯草 A. 一叶及二腋生雄头状花序, B. 雄头状花序 (上面观), C. 同 B (下面观), D. 二雄小苞片

Fig. 6 *Elatostema pseudoplatyphyllum* W. T. Wang

A. a leaf and two axillary staminate capitula, B. staminate capitulum, seen from above, C. the same as B, seen from beneath, D. two staminate bracteoles. (from holotype)

oblique ellipticae, 10–25 cm longae, 4.5–9.5 cm latae, apice acuminatae, acuminibus margine denticulatis, basi lateris angustioris cuneatae basi lateris latioris auriculatae, auriculis 5–10 mm longis, margine supra basin dentatae, supra strigosae, subtus glabrae, semitriplinerves, nervis lateralibus laminae latere angustiore 2–3 in latere latiore 3–5, supra planis vel leviter impressis subtus prominulis, cystolithis densis parvis breviter bacilliformibus 0.1–0.2 mm longis; petioli 2–5 mm longi, glabri; stipulae viridulae, anguste lanceolatae, 12–22 mm longae, 2–2.5 mm latae, glabrae, 1-nerves. Capitula staminata juvenalia binatim axillaria; pedunculus robustus, 2–3 mm longus, glaber; receptaculum oblongum, circ. 8 mm longum, 5 mm latum, medio 2-lobatum, glabrum; bracteae 6, biseriatae, glabrae, eae externae 2, oppositae, depresso semiorbiculares, 2–3 mm longae, 4.5–6.2 mm latae, eae internae 4, fere semiorbiculares, 2.8–3 mm longae, 5–5.5 mm latae, apice emarginatae; bracteolae densissimae, semihyalinae, cuneato-lineares, 1.6–2 mm longae, apice interdum cucullatae, glabrae, in parte centrali longitudinaliter dense brunneo-striatae. Flores staminati perjuvenales.

多年生草本。茎高约 40 cm, 基部粗约 5 mm, 有 4 条浅纵沟, 不分枝, 有时有少数短分枝。叶有短柄; 叶片纸质, 斜椭圆形, 长 10 ~ 25 cm, 宽 4.5 ~ 9.5 cm, 顶端渐尖 (渐尖头边缘有小牙齿), 基部在狭侧楔形, 在宽侧耳形 (耳垂部分长 5 ~ 10 mm), 边缘在基部之上有牙齿, 上面被糙伏毛, 下面无毛, 钟乳体密, 小, 杆状, 长 0.1 ~ 0.2 mm, 半离基三出脉, 侧脉在狭侧 2 ~ 3 条, 在宽侧 3 ~ 5 条, 上面平或稍下凹陷, 下面稍隆起; 叶柄长 2 ~ 5 mm, 无毛; 托叶狭披针形, 长 12 ~ 22 mm, 宽 2 ~ 2.5 mm, 无毛, 有 1 脉。幼雄头状花序成对腋生; 花序梗粗壮, 长约 2 mm, 无毛; 花序托长圆形, 长约 8 mm, 宽 5 mm, 中央 2 浅裂, 无毛; 苞片 6 枚, 排列成二层, 无毛, 外层苞片 2 枚, 对生, 扁半圆形, 长 2 ~ 3 mm, 宽 4.5 ~ 6.2 mm, 内层苞片 4, 近半圆形, 长 2.8 ~ 3 mm, 宽 5 ~ 5.5 mm, 顶端微凹; 小苞片极密, 半透明, 楔状条形, 长 1.6 ~

2 mm, 顶端有时呈兜状, 无毛, 中央有密集褐色纵条纹。雄花尚幼。

云南: Gongshan Xian (贡山县), Dulongjiang Xiang (独龙江乡), in the vicinity of Maku (马库), southern region of the Dulong Jiang valley on the W side of the Dulong Jiang, elev. 1 350 m; 17 December 1990; Dulong Jiang Investigation Team 1158 (♂, holotype, CAS). Same locality, in the vicinity of Bapo (巴坡), on the E side of the Dulong Jiang, elev. 1 370 m; 15 November 1990; Dulong Jiang Investigation Team 301 (♂, CAS). Same locality, in the vicinity of Mabidang, ca. 5 km N of (巴坡) on the E side of the Dulong Jiang, elev. 1 350 m; 16 November 1990; Dulong Jiang Investigation Team 456 (♂, CAS).

本种在亲缘关系上很接近宽叶楼梯草 *E. platyphyllum* Wedd., 但叶片上面被糙伏毛, 耳垂部分较小, 长 5 ~ 10 mm, 雄头状花序的苞片正常发育, 半圆形, 长 2 ~ 3 mm, 小苞片无毛, 可以区别。在宽叶楼梯草, 叶片上面无毛, 耳垂部分较大, 长达 14 mm, 雄头状花序的苞片强烈缩小, 不明显, 极宽扁卵形, 长不到 0.2 mm, 小苞片有缘毛, 而与本种不同, 可能自本种衍生而出 (Wang, 1995)。

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第十届全国药用植物及植物药学术研讨会

第十届全国药用植物及植物药学术研讨会定于2011年8月10—12日在素有“春城”美誉的云南省昆明市举行。本次会议由中国植物学会药用植物及植物药专业委员会、中国科学院昆明植物研究所联合主办,由中国科学院昆明植物研究所植物化学与西部植物资源持续利用国家重点实验室承办。会议主题是“多学科交叉,产学研联合,实现西部药用植物资源的可持续利用”,涉及药用植物资源现状与展望、药用植物与植物药资源调查及品质鉴定、药用植物与植物药生物活性物质及其作用机制、药用植物资源保护与可持续利用、药用植物资源与新药研发、中药材GAP种植问题与对策、民族民间药研发及产业化、西部药用植物资源实地考察等方面内容。

会议将邀请国内外相关领域院士和知名专家学者就国内外药用植物、植物药、中药、民族药和民间药等方面研究的最新进展、发展趋势及热点等作大会报告,并设分组报告,出版论文摘要集,遴选优秀论文在《植物分类与资源学报》(原《云南植物研究》)发表,提供墙报展览、专家名录等交流平台,是药用植物及植物药学界同仁相聚一堂、共筑未来的盛会。我们热诚欢迎大家踊跃参加本次学术盛会。

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